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A comparison was made of the effectiveness of a simulation-type inservice education program on teacher awareness of pupils' instructional reading levels in relation to the time of school year that the inservice program was conducted. Specific simulation processes, including sound films, audio tapes, overhead transparencies, and instructional booklets, provided teachers with a knowledge of, and the ability to administer, an informal reading inventory. A three-group-post-test-only control group research design utilized three stratified random samples of 32 teachers each from grades 2 through 5 in a large suburban school district. Pupils were randomly selected from each teacher's classroom. Differences between the grade level of pupils' readers and their performance on McCracken's Standard Reading Inventory constituted the measure of teacher awareness. Findings indicated that this inservice program was effective only when conducted before school begins. Those teachers who participated in the program later in the school year were no more aware of pupils' instructional levels than those who did not participate. References are included. (Author/CM)

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USING AN INFORMAL READING INVENTORY TO PLACE CHILDREN IN INSTRUCTIONAL MATERIALS: THE BEREA, OHIO IN-SERVICE EDUCATION EXPERIMENT

SYMPOSIUM IV

THE VALIDITY OF INFORMAL READING TESTING

Friday, May 2, 1969 2:15 - 3:15 P.M.

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Significance of the Problem

A teacher must know how difficult material a pupil can read in order that the pupil may be assigned materials which challenge his abilities without discouraging him by their difficulty. In adjusting to individual differences in reading, the importance of selecting suitable materials for every reading situation cannot be overemphasized (4). If a pupil receives instruction from materials which are too easy for him, he is not motivated to attain maximum growth. In contrast, if a pupil receives instruction from books which are too difficult, he may become frustrated and discouraged when he is unable to meet the standards of achievement established for him.

Substantial confirmation that reading authorities regard the selection of

inappropriate materials as a major contributing cause of reading difficulties is evidenced throughout the literature (8, 10). Conversely, greater gains in achievement are made by pupils when reading materials are adjusted to their levels of instruction. This principle has been validated by the research of Cooper and others (5, 9). The problem is one of translating theory and research into effective classroom practice. Unfortunately, many teachers continue to be frustrated by the wide range of pupil reading achievement found within their classrooms whether they teach in affluent suburban or in depressed ghetto schools. Regardless of the methodology used in teaching reading, the teacher must, if he is most effective, have accurate and current information about each pupil's level of reading achievement.

Observations and a brief survey of current practices led to the conclusion that most teachers follow two general procedures in selecting instructional reading materials for pupils in their classrooms. On one hand, teachers commonly attempt to determine a pupil's instructional reading level by referring to group-administered standardized test scores, either reading tests or achievement tests. Or, they listen to a pupil read orally from a book. Often, this procedure represents a rather crude and unsystematic utilization of the informal reading inventory technique. Both of these procedures are fraught with difficulties.

However, the weight of available research evidence seems to support the conclusion that standardized test scores tend to overestimate a pupil's instructional reading level (13). Furthermore, standardized test results may not always be current, and their results may be difficult for the teacher to interpret in terms of pupils' instructional reading levels (15).

Reading authorities (1, 7) agree that the informal reading inventory represents one of the most powerful instruments readily available to the classroom teacher for assessing a pupil's instructional reading level. In the hands of a skillful and perceptive examiner, the informal reading inventory may be used to identify accurately the major aspects of a pupil's functional reading

behavior.

An informal reading inventory is perhaps best described as an individualized measurement of reading performance, based on standard criteria, where the subject reads silently and orally, selected passages from a graded series of reading materials in order to determine his functional reading levels. Group informal inventories may also be administered, and they follow a procedure similar to the individualized inventory.

Thus, the use of standardized test scores as a basis for estimating pupils' instructional reading levels appears to be less desirable than the use of the informal reading inventory for this purpose. However, even though the informal reading inventory represents a most effective instrument for evaluating a reader's performance, perhaps its greatest disadvantage relates to the competency of the examiner since the accuracy of the data secured through its use depends almost entirely upon the competence of the examiner. For example, Millsap's study (12) reveals that experienced classroom teachers were not cognizant of the frustration reading levels among their pupils in basal readers when they were asked to utilize informal reading inventory techniques to make this determination.

Although it is easy to state that teachers should determine accurately each pupil's functional reading levels in order to provide appropriate reading materials, the actual performance of this task leaves much to be desired.

The Berea, Ohio In-Service Education Experiment

Therefore, the Berea, Ohio In-Service Education Experiment was undertaken to obtain objective data to determine the effects of a specifically designed in-service program, which utilized simulation-type techniques, on teacher awareness of the instructional reading levels of pupils in the classroom. This in-service activity was designed to provide classroom teachers with a knowledge of, and the ability to administer, an informal reading inventory in order that they may select more accurately, reading materials appropriate for their pupils' instructional reading levels in their classrooms. The

informal reading inventory was selected as the basic in-service procedure because it provides, when properly administered, a realistic example of the pupil's current reading performance, and thus seemed a most promising way of improving classroom practice.

An expanded model of the Informal Reading Inventory Instructional Process developed by Beldin, Utsey, and Wallen (2) was selected as the vehicle to provide the in-service experience. For the past three years, these authors have been developing and testing simulation-type materials for training preparatory and in-service teachers to assess pupils' specific reading requirements and to identify the types of instructional arrangements most appropriate for meeting each need. These simulation materials were designed to prepare teachers for one of the most crucial tasks they will face in the teaching of reading--the selection of reading materials at appropriate instructional levels for each child.

These simulation materials include--16mm sound films, audio-tapes, overhead transparencies, and instructional booklets. The Informal Reading Inventory Instructional Process has been designed so there will be a maximum transfer of learning to the classroom setting. The materials used in the process involve the participants actively in the types of problems which they face in the day by day operation of their classrooms. For example, the films used in the simulation training actually involve the viewer (the teacher) as he must administer an informal reading inventory to a boy who had been recently assigned to the simulated classroom setting. This procedure assures practice of a learning task in a situation very similar to the one in which it will later be performed in the classroom.

In this experiment, teacher awareness was defined as the teachers' accurate perception of the instructional reading levels of pupils in the classroom. This awareness was determined by measuring the instructional reading levels of a randomly selected pupil from the classroom of each of the ninety-six teachers in the experiment on McCracken's Standard Reading Inventory (11) and the readability level of the instructional reading material to which the pupil had been

assigned for reading instruction. The readability level was determined by the application of the Spache Readability Formula (14) for primary level readers and the Dale-Chall Formula for Predicting Readability (6) for reading materials above primary level. These two formulas were also used as a part of the standardization procedure for the Standard Reading Inventory. A close relationship between the two variables indicates a high degree of teacher awareness since the size of this difference is inversely related to teacher awareness of pupils' instructional reading levels.

As a further determination of teacher awareness, pupils in the sample were asked to read a selection of approximately 100 words near the "story" they had been reading in class. Betts' criteria (3) were applied to determine if the book could be classified at the pupils' instructional reading level.

Thus, the fundamental purposes of this experiment were: one, to determine the relative effectiveness of an adapted model of the Informal Reading Inventory Instructional Process as a means of helping teachers become more cognizant of the instructional reading levels of pupils in the classroom; and two, to determine if the time of the school year when the teacher participates in this in-service activity makes a significant difference on teachers' awareness of the instructional reading levels of pupils in the classroom.

An auxiliary purpose of the experiment related to whether or not primary level teachers are more sensitive to the reading needs of pupils than upper grade teachers.

First, it was hypothesized that pupils of teachers who participated in an adapted model of the Informal Reading Inventory Instructional Process in-service activity were assigned reading materials more appropriate for their instructional reading levels than pupils of teachers who did not participate. Second, it was hypothesized that the time of the school year when the in-service program is scheduled does make a difference in its effectiveness. Finally, it was hypothesized that those who teach grades two and three are more aware of pupils' instructional reading levels than those who teach grades four and five.

A three-group post-test-only control group research design was used in the experiment. Ninety-six classroom teachers were selected from 191 teachers from grades two through five of a large middle-class suburban school system by a stratified random process. The selected teachers were then assigned to three samples by a stratified random process. Each sample consisted of eight teachers from each of the four grade levels--making a total of 32 teachers in each sample.

The in-service activity, an adapted model of the Informal Reading Inventory Instructional Process, represented the independent variable in the experiment; and teachers' awareness of the instructional reading levels of pupils in the classrooms represented the criterion variable.

One experimental sample of teachers participated in the in-service activity during five sessions of two-hours each over a two week period, before the school year began and before the teacher had organized within-class reading groups. Another experimental sample of teachers participated in a similar type of in-service experience at the end of the first six weeks of the first semester, after the teachers had organized their classrooms and assigned basal reading materials to pupils. And, the third sample was designated as the control group. Teachers from this group did not participate in the in-service activity, nor were they aware they were participating in the experiment.

The data from the pupils' performance on the Standard Reading Inventory and the readability levels of their basal readers were transformed into normalized standard scores for the purpose of statistical comparison. "Reading inventory-readability difference" scores were computed for each pupil in the experiment. The size of this difference is inversely related to teacher awareness of pupils' instructional reading levels.

Analyses of these "reading inventory-readability difference" scores were made through the application of a three by four mixed model (fixed and random) analysis of variance. Further analyses were computed through the application of the appropriate techniques for multiple comparisons among means.

Findings--Implications--Prescriptions

The findings in this experiment indicate that the adapted model of the Informal Reading Inventory Instructional Process appears to provide an in-service education vehicle that may assist teachers in becoming more aware of the instructional reading levels of pupils in their classrooms in order to assign them materials appropriate for their instructional levels if the in-service experience is scheduled before they make instructional decisions regarding pupils' reading materials.

At least, in this experiment, when pupils' basal reading materials were evaluated for appropriateness in terms of their instructional reading levels, it was found:

1. Teachers who participated in a simulation-type in-service program early in the school year immediately before they needed the skills developed in the in-service program, were significantly more aware of the instructional reading levels of pupils in the classrooms than those teachers who participated in the simulation-type in-service experience later in the school year after they had assigned pupils' basal readers.
2. There was no significant difference in teachers' awareness of pupils' instructional reading levels in the classrooms between teachers who participated in the simulation-type in-service program later in the school year and teachers who did not participate in a simulation-type in-service program.
3. Teachers who participated in a simulation-type in-service program early in the school year before they had assigned pupils' basal readers were significantly more aware of the instructional reading levels of the pupils in the classroom than those teachers who did not participate in a simulation-type in-service experience.

Although not statistically significant, other comparisons among samples favored teachers who had participated in the simulation-type in-service program before they had assigned their pupils' basal readers. All of these teachers,

who had participated before they needed the skills, grouped their pupils for reading instruction within the classroom. Also, they organized an average of 3.22 reading groups to accommodate individual pupil reading differences, and they utilized an average of 2.56 different criteria for placing pupils into reading groups.

Pupils of these teachers reported a significantly greater interest in telling stories, and nearly half of these pupils listed reading as their "most favorite" school subject.

The time that a simulation-type in-service program is scheduled appears to be a fundamental consideration which is related to classroom application for experienced teachers on the job. A simulation-type in-service program was not as valuable when scheduled during the year as teachers do not appear to change practices.

It was also found that primary grade teachers were significantly more aware of pupils' instructional reading levels in a simulation test experience than intermediate grade teachers. However, there was a contravertible difference between primary grade teachers' awareness of pupils' instructional reading levels in the classrooms and intermediate grade teachers.

Therefore, the general conclusions reported in this experiment may provide plausible suggestions for designing in-service education programs which relate to the specific needs of the classroom teacher and which can improve instruction in the classroom.

Teachers who participated in the simulation-type in-service program were enthusiastic. They indicated they were impressed with the realistic portrayal of the classroom environment in the simulation experience and with the idea that these simulation experiences would assist them in the day by day operation of their classrooms. Although these judgments are subjective, they convey the impression of great interest in the activity.

Finally, over 95 per cent of the teachers who participated in the in-service experience before school began reported they used informal reading inventory criteria as one criterion for placing their pupils into reading groups and assigning them instructional reading materials.

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IRA ABSTRACT

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Using an Informal Reading Inventory to Place Children in Instructional Materials:
The Berea, Ohio In-Service Education Experiment
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Purposes

Compares the effectiveness of a simulation-type in-service education program on teacher awareness of instructional reading levels of pupils in the classroom in relation to the time of school year the in-service program was conducted and to the importance of teachers' grade-level assignments. Specific simulation processes provided teachers with a knowledge of, and the ability to administer, an informal reading inventory in order that they may select more accurately reading materials appropriate for their pupils' instructional reading levels. These simulation experiences represented the independent variable. A three-group-post-test only control group research design utilized three stratified random samples of thirty-two teachers each from grades two through five from a large suburban school district. Pupils were selected randomly from each teacher's classroom. Differences between the grade level of pupils' readers and their performance on McCracken's Standard Reading Inventory constituted the measure of teacher awareness and represented the criterion variable. Analyses were made through the application of a three-by-four mixed model (fixed and random) analysis of variance. Findings indicated that this in-service program was effective only when conducted before school begins. There was a significant difference in teacher awareness among grade levels but a contravertible one between primary and intermediate levels.

Methods

Results and Conclusions